

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name: Synergy 905**
- **Article number:** 11905-04
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation:**  
For industrial use only  
Metalworking fluid concentrate
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**  
BLASER SWISSLUBE AG  
Winterseistrasse 22  
CH-3415 Hasle-Rüegsau  
Switzerland  
Tel.: +41 (0)34 460 01 01  
Fax: +41 (0)34 460 01 00  
E-mail: blaser@blaser.com
- **Further information obtainable from:**  
Product Safety Department  
E-mail: reach@blaser.com
- **1.4 Emergency telephone number:**  
Abbreviated dialing: 145 (or: ++41 (0)44/ 251 51 51) Toxicological Info-Centre CH-Zurich

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture:**
- **Classification according to Regulation (EC) No 1272/2008**  
Skin Irrit. 2            H315 Causes skin irritation.  
Eye Irrit. 2            H319 Causes serious eye irritation.  
Aquatic Chronic 3    H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
Alkanolamine  
1-aminopropan-2-ol
- **Hazard statements**  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**  
P280            Wear protective gloves/protective clothing/eye protection/face protection.  
P273            Avoid release to the environment.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332+P313    If skin irritation occurs: Get medical advice/attention.

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# Safety Data Sheet

according to 1907/2006/EC, Article 31 and 830/2015/EC

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P337+P313 If eye irritation persists: Get medical advice/attention.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards** None
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of nitrogen-containing organic acids (salts) and inhibitors.

· **Declarable, or hazardous components:**  
**CAS-no.**

	Carboxylic acids, neutralized with alkanolamines Skin Irrit. 2, H315; Eye Irrit. 2, H319	>5,0-9,9%
CAS: 4500-29-2 EINECS: 224-809-5 Reg.nr.: 01-2119962183-38-0000	Alkanolamine STOT RE 2, H373; Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4, H302	>1,0-4,9%
	Benzotriazole, compound with alkanolamines (1:1) Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	>1,0-2,9%
CAS: 78-96-6 EINECS: 201-162-7 Reg.nr.: 01-2119475331-43-0000	1-aminopropan-2-ol Skin Corr. 1B, H314; Acute Tox. 4, H312	>1,0-2,9%
	Dicyclohexylamine* Acute Tox. 3, H301; Acute Tox. 3, H311; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 1,00%
CAS: 31075-24-8 Polymer Reg.nr.: not applicable, confidential	Poly quaternary ammonium chloride Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1); Acute Tox. 4, H302; Acute Tox. 4, H332	< 0,25%

· **Additional information:**

\* Neutralisation product: Equilibrium of Ionic Pairs according to REACH Annex V, 4.  
 Not mentioned CAS-, EINECS- or registration numbers are to be regarded as Proprietary/Confidential.  
 For the wording of the listed risk phrases refer to section 16.

## SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:**  
In case of unconsciousness place patient stably in side position for transportation.  
Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

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### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information** Cool endangered receptacles with water spray.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.  
Observe the general safety regulations when handling chemicals.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**  
Do not store together with oxidising and acidic materials.  
Store away from oxidising agents.
- **Further information about storage conditions:**  
Protect from heat and direct sunlight.  
Optimal storage temperature between 0 °C and 40 °C.  
Duration of storage: In closed original container, at least 18 months.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values at the workplace:**  
General indication value for metalworking fluids (without obligation): 10 mg/m<sup>3</sup>.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.

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Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Material of gloves**

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the resultant standard EN 374.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

The break through, among others, depending on material density and the type of glove and therefore must be determined in each individual case.

Gloves must be inspected prior to use. Replace when worn!

Impervious gloves: nitrile rubber, minimum thickness of 0.3 mm.

· **Penetration time of glove material**

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Eye protector with side protection (framed eyeglasses) EN 166.

· **Body protection:** Protective work clothing

## SECTION 9: Physical and chemical properties

### · 9.1 Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

<b>Form:</b>	Fluid
<b>Colour:</b>	Yellow
<b>Odour:</b>	Weak, characteristic

· **pH-value:** 8,7 - 9,5 @ 50 g/l H<sub>2</sub>O (DIN 51369 / ASTM D1287)

#### · Change in condition:

<b>Melting point/Melting range:</b>	Not applicable
<b>Boiling point/Boiling range:</b>	> 100 °C (DIN 51751 / ASTM D86)
<b>Drip point:</b>	Not applicable
<b>Pour point:</b>	< 0 °C (ISO 3016 / ASTM D97)

· **Flash point:** 144 °C (ISO 2592 / ASTM D92)

· **Ignition temperature:** Not applicable

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

#### · Explosion limits (@1013 mbar):

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>Refractive index:</b>	1.404

· **Density at 20 °C:** 1,06 g/cm<sup>3</sup> (DIN 51757 / ASTM D1217)

· **Solubility in / Miscibility with water:** Fully miscible.

#### · Viscosity:

**Kinematic at 40 °C:** 5,9 mm<sup>2</sup>/s (ISO 3104 / ASTM D445)

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- **9.2 Other information:** safety relevant data, which has to be considered as product specifications.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** None known if used as directed.
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** Reacts with strong acids and oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
Carbon monoxide and carbon dioxide  
Nitrogen oxides (NO<sub>x</sub>)

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
- **LD/LC50 values relevant for classification:**  
> 2000 - < 5000 mg / kg (oral, rat)  
> 5,100 mg/m<sup>3</sup> 4h (inhalation, rat)

#### ATE (Acute Toxicity Estimates)

Oral	LD50	9615 mg/kg
Dermal	LD50	10753 mg/kg (rabbit)
Inhalative	LC50/4 h	119 mg/L

#### 95-14-7 Benzotriazole

Oral	LD50	500 mg/kg (ATE)
Inhalative	LC50/4 h	11 mg/L (ATE)

#### 101-83-7 dicyclohexylamine

Oral	LD50	200 mg/kg (rat)
Dermal	LD50	200-316 mg/kg (rabbit)
Inhalative	LC50/4 h	> 1,4 mg/L (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

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## SECTION 12: Ecological information

### · 12.1 Toxicity

#### · Aquatic toxicity:

#### 101-83-7 dicyclohexylamine

EC50/48h	0,38 mg/L (Algae)
	201 mg/L (Bak)
	62 mg/L (Brachydanio rerio)
	8 mg/L (Daphnia magna)

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

#### · Ecotoxicological effects:

· **Remark:** Harmful to fish

#### · Additional ecological information:

#### · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Harmful to aquatic organisms

Do not allow product to reach ground water, water course or sewage system.

#### · 12.5 Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

### · 13.1 Waste treatment methods

#### · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

#### · European waste catalogue

12 01 10*	synthetic machining oils
12 01 09*	machining emulsions and solutions free of halogens

#### · Uncleaned packaging:

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## SECTION 14: Transport information

### · 14.1 UN-Number

· **ADR, ADN, IMDG, IATA** Void

### · 14.2 UN proper shipping name

· **ADR, ADN, IMDG, IATA** Void

### · 14.3 Transport hazard class(es)

· **ADR, ADN, IMDG, IATA**

· **Class** Void

### · 14.4 Packing group

· **ADR, IMDG, IATA** Void

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· <b>14.5 Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	Not dangerous according to the above specifications.
· <b>IATA</b>	IATA Dangerous Goods Regulation (DGR) 56th Edition 2015
· <b>UN "Model Regulation":</b>	Void

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008:**  
CLP/GHS label elements are issued under section 2.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**  
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57**  
This preparation does not contain any SVHC ("Substances of Very High Concern")
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Regulations / approvals / listings:**

Information on REACH registration numbers in section 3:

In case of lack of REACH registration numbers on mentioned hazardous substances at the end of 2010, then these numbers will be known and indicated only in section 3 within its tonnage band for registration, after the end of 2013, respectively by the end of 2018, or are exempt from the REACH regulation (e.g. polymers).

- **RoHS:**

The product is compliant with European Directives 2011/65/EC, 2002/95/EC, WEEE 2002/96/EC, 2003/11/EC, 2005/53/EC and RoHS.

The following substances ARE NOT contained:

Pentabromodiphenylether, Octabromodiphenylether, polybrominated diphenylether (PDBE) and / or polybrominated biphenyls (PBB), lead or it's compounds, cadmium or it's compounds, mercury or it's compounds, chromium Cr<sup>6+</sup>-compounds.

- **Department issuing MSDS:** Product Stewardship
- **Contact:** Dr. Mosimann + Mr. Frei

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· **Editor's notice:**

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications have not the meaning of guarantees on properties.

· **Abbreviations and acronyms:**

RoHS: Restriction of Hazardous Substances

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

ISO: International Organisation for Standardisation

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

CLP: Classification, Labeling and Packaging (European GHS)

PBT: Persistent, Bioaccumulative and Toxic chemicals

vPvB: very Persistent and very Bioaccumulative chemicals

Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

· **\* Data compared to the previous version altered.**

The asterisk (\*) on the left side indicate the respective changes from the previous version.